

CLAIMS

- 5        1. In a communication network with user access via a plurality of data processor controlled interactive display terminals for sending and receiving broadcasting packets, an electronic document distribution system for routing broadcasting packets from a sending server to a receiving server comprising:
- 10                means for temporarily coding a broadcasting payload to a set of symbols;  
                 means for temporarily stripping the broadcasting payload from the broadcasting packet;  
                 means for temporarily replacing the broadcasting packet with a coded symbol;  
                 means for adding the coded symbol to a header;
- 15                means for transmitting the coded header and a coded payload of the broadcasting packet to the receiving server via the broadcasting router;  
                 and  
                 means for converting a corresponding broadcasting payload from its coded format to form a full broadcasting packet in the receiving server.
- 20        2. The communication network of claim 1 further comprising means in the document distribution system for reducing the broadcasting payload of the broadcasting packet to a coded header.
3. The communication network of claim 2 further comprising:
- 25                means for receiving the coded header and patching the corresponding broadcasting payload from storage to form the full broadcasting packet;  
                 and  
                 means for relaying the broadcasting payload to a destination router according to its address.
4. The communication network of claim 3 wherein said document distribution
- 30                system is an electronic mail distribution system associated with electronic mail sources.
5. The communication network of claim 3 wherein:

said communication network is a distributed network;  
said broadcasting payloads are digitized packets;  
said document sources are packets; and  
said network distribution system is a network server system. ✓

- 5        6. In a communication network with user access via a plurality of data processor controlled interactive display terminals for sending and receiving broadcasting packets, a method of distributing transmitted electronic documents routing broadcasting packets from a sending server to a receiving server including the steps of:
- 10                coding the broadcasting packet to a set of symbols temporarily;  
stripping the broadcasting payload temporarily from the broadcasting packet;  
replacing the broadcasting packet temporarily with a coded symbol;  
adding the coded symbol to a header;
- 15                transmitting a coded header and a coded payload of the broadcasting packet to the receiving server via the broadcasting router; and  
converting a corresponding broadcasting payload from its coded format to form a full broadcasting packet in the receiving server.
- 20        7. The method of distributing electronic documents of claim 6 further including the step of reducing the broadcasting payload of the broadcasting packet to a coded header.
- 25        8. The method of distributing electronic documents of claim 7 further including the steps of:  
receiving the coded header and patching the corresponding  
broadcasting payload from storage to form the full broadcasting packet;  
and  
relaying the broadcasting payload to a destination router according to its address.
- 30        9. The method of distributing electronic documents of claim 8 wherein said document distribution system is an electronic mail distribution system associated with electronic mail sources.

10. The method of distributing electronic documents of claim 8 wherein:

said communication network is a distributed network;

said broadcasting payloads are digitized packets;

said document sources are packets; and

5           said network distribution system is a network server system.

11. A computer program having code recorded on a computer readable medium for distributing electronic documents in a communication network with user access via a plurality of data processor controlled interactive display terminals for sending and receiving broadcasting packets, said program for routing

10       broadcasting packets from a sending server to a receiving server comprising:

means for temporarily coding a broadcasting payload to a set of symbols;

means for temporarily stripping the broadcasting payload from the broadcasting packet;

15       means for temporarily replacing the broadcasting packet with a coded symbol;

means for adding the coded symbol to a header;

means for transmitting a coded header and a coded payload of the broadcasting packet to the receiving server via the broadcasting router;

and

20       means for converting a corresponding broadcasting payload from its coded format to form a full broadcasting packet in the receiving server.

12. The computer program of claim 11 further including means in the document distribution system for reducing the broadcasting payload of the broadcasting packet to a coded header.

25       13. The computer program of claim 12 further including:

means for receiving the coded header and patching the corresponding broadcasting payload from storage to form the full broadcasting packet;

and

means for relaying the broadcasting payload to a destination router

30       according to its address.

14. The computer program of claim 13 wherein said document distribution system is  
an electronic mail distribution system associated with electronic mail sources.

15. The computer program of claim 13 wherein:

said communication network is a distributed network;

5           said broadcasting payloads are digitized packets;

said document sources are packets; and

said network distribution system is a network server system.

10

15

20

25

30